Musical Mathematics

An introduction to math with full-color graphics, animation, sound and songs

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HAYDEN SOFTWARE

Introduction

Overview

With color, graphics, sound and songs MUSICAL MATH is an exciting computer math game for pre-schoolers through adults.

For younger children MUSICAL MATH is an early introduction to counting skills or a musical alternative to flash cards. For older children and adults MUSICAL MATH is the ultimate math challenge with a musical response. "Whistle While You Work" with MUSICAL MATH. Practice math drills and skills to the tune of "I've Been Working on the Railroad," "Yankee Doodle," "She'll Be Coming Round the Mountain," "This Old Man" and many other familiar favorites.

From a menu display a player chooses Addition, Subtraction, Multiplication and Division, each on three different levels.

Addition and Subtraction

Beginner Level —	Number problems from 1 to 20 (Pre-school through 2nd grade curriculum)
Intermediate Level —	Double digit equations
Expert Level —	Triple digit challenges

Multiplication and Division

Beginner Level —	Number problems up to the 9's table (through 2nd and 3rd grade curriculum)
Intermediate Level —	Number problems through the 12's table (through 4th grade curriculum)
Expert Level —	Challenges for math wizards from ages 10 to adult

MUSICAL MATH creates two new random numbers for each problem throughout the program and generates evenly divisible equations even on

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the expert level. MUSICAL MATH displays a score tally throughout the game, and provides correct answers after a number of incorrect attempts.

MUSICAL MATH was written for children and adults to use individually or for multiple players, taking turns. Written by an educator, MUSICAL MATH reinforces classroom curriculum and provides a computer game opportunity to learn and practice life-long math skills in an entertaining and musical way.

Required Accessories and Minimum RAM

ATARI BASIC Language Cartridge

Cassette version

ATARI 410 Program Recorder
16K RAM

Diskette Version

ATARI 810 Disk Drive
24K RAM

Getting Started

If you have the cassette version of MUSICAL MATH

1. Insert the BASIC Language Cartridge into the computer's cartridge slot.
2. Insert the MUSICAL MATH cassette into the program recorder's cassette holder. Press REWIND on the recorder until the tape rewinds completely, then press STOP.
3. Turn on the computer and the video screen.
4. Using the computer's keyboard type CLOAD then press RETURN.
5. Press PLAY on the program recorder. Press RETURN again on the computer's keyboard. After the READY prompt appears on the video screen, type RUN on the computer's keyboard and press RETURN.

If you have the diskette version of MUSICAL MATH

1. Insert the BASIC Language Cartridge into the computer's cartridge slot.
2. Open the disk drive door and insert the MUSICAL MATH diskette with the label in the lower right-hand corner nearest to you. Turn on the disk drive.
3. Turn on the computer and the video screen.

MUSICAL MATH loads into computer memory and begins.

The first display screen

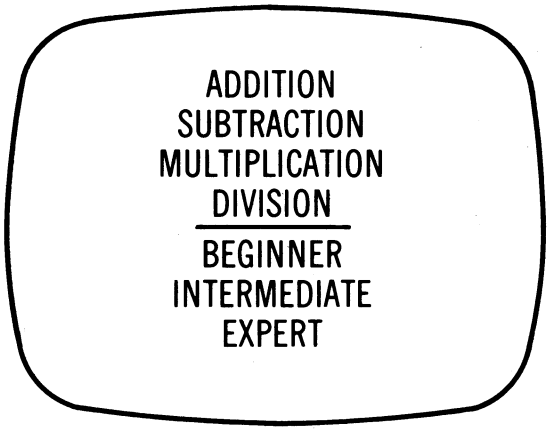
After a "MUSICAL MATH, Please Stand By . . ." screen MUSICAL MATH suggests you

"Whistle While You Work
Just do your best, then take a rest, and sing
yourself a song."

Functions, Commands and Menus

MUSICAL MATH would like to get to know you. To the tune of "Row, Row, Row Your Boat" MUSICAL MATH asks "Hello, what's your name?". Type your name and press the RETURN key. Now you are all set to choose your math game.

Your math game choice screen looks like this:



PRESS OPTION TO CHOOSE MATH GAME
PRESS SELECT TO CHOOSE SKILL LEVEL
PRESS START TO BEGIN OR START OVER

The OPTION and SELECT buttons cause the choices to change color. If you are interested in playing MUSICAL MATH Multiplication on the Expert Level, press the OPTION button until Multiplication turns orange and press the SELECT button until Expert turns orange. When each of your selections is orange, press the START button and you're ready to play.

When an equation appears on the screen MUSICAL MATH accepts only numbers from the keyboard. Type in your answer. You need not press RETURN. If the correct answer requires e.g., a 2-digit answer MUSICAL MATH waits for you to enter the second digit before it tells you if your answer is correct or incorrect. If your answer is incorrect MUSICAL MATH gives you up to 3 attempts, then tells you the correct answer.

If any of the questions are too difficult or too easy for you, or if you choose to start the game over, press START and you return to the beginning of the game.

MUSICAL MATH keeps a current score throughout the game and at the end of ten questions displays a total score screen then returns you to the beginning of the game.

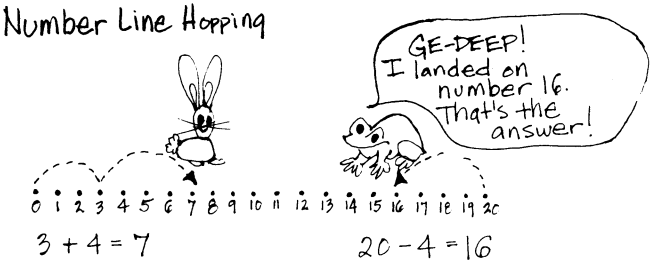
You may wish to make up a MUSICAL MATH score sheet like the one that follows. It reflects the progress of each player.

Game Variations

Here are some pencil or magic marker suggestions to help you learn and practice your math skills while playing MUSICAL MATH.

You may wish to make up your own practice sheets from these examples. Have fun while you learn!

Addition and Subtraction (Beginner Level)



When MUSICAL MATH asks a math question on the video screen use your pencil or magic marker and this number line and HOP the same number of hops as the numbers on the screen.

Hop FORWARD for Addition

e.g. 3 hops + 4 hops = 7

Hop BACKWARD for Subtraction

e.g. 20 hops − 4 hops = 16

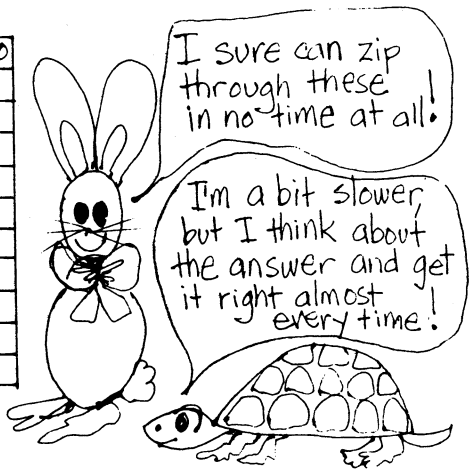
When you finish hopping you land on your answer. Type that number on the keyboard and MUSICAL MATH plays a tune if your answer is correct.

Addition (Beginner Level)

Play this game in the same way as the Multiplication Table which follows.

Addition Table

+	1	2	3	4	5	6	7	8	9	10
1										
2										
3										
4										
5										
6										
7										
8										
9										
10										



Multiplication (Beginner and Intermediate Level)

Multiplication Table

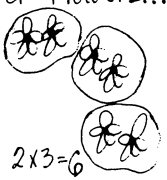
X	1	2	3	4	5	6	7	8	9	10	11	12
1												
2												
3												
4												
5												
6												
7												
8												
9												
10												
11												
12												

It might help to think of numbers in GROUPS or SETS of things that are interesting to you...

like lollipops...

4 x 2 = 8

or flowers...



2x3=6

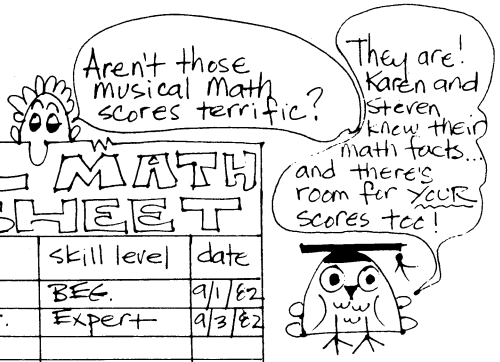
or CATERPILLARS

3 x 2 = ?

If there are 3 caterpillars on one leaf, and 3 caterpillars on another how many caterpillars are there in all?

For one player or multiple players, taking turns. When MUSICAL MATH asks a multiplication question on the video screen type the correct answer on the computer's keyboard. Remember, you have up to 3 attempts before your answer counts as a wrong answer, so keep trying! When MUSICAL MATH plays a tune for your correct answer, use a magic marker and write the correct answer in the appropriate box, as shown above. (Use a different color magic marker for each player.) When all the boxes are completely filled the game ends. The player with the greatest number of correct answers (e.g. the greatest number of entries written in RED on the grid) WINS!

Musical Math


Aren't those musical math scores terrific?
They are! Karen and Steven knew their math facts... and there's room for YOUR scores too!

MUSICAL MATH SCORE SHEET

# correct	name	game	skill level	date
9	KAREN	ADD.	BEG.	9/1/82
7	Steven	MULT.	Expert	9/3/82

Full color, high resolution graphics, animation, sound and songs make this the perfect computer math game to introduce pre-schoolers to basic math skills. A musical, attention-holding alternative to dull flash cards. For older children and adults, Musical Math is the ultimate math challenge — as your skills progress, the game gets increasingly difficult.

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Catalog No.: 14312 Atari Tape
14319 Atari Disk